

WHAT IS CLAIMED IS:

1. A protein having SEQ ID NO: 1 that is glycosylated or non-glycosylated.
2. A fragment of SEQ ID NO:1 that is glycosylated or non-glycosylated.
3. An antibody that selectively binds to a protein having SEQ ID NO:1, or a fragment thereof.
4. The antibody of claim 3, wherein the antibody is a monoclonal or a polyclonal antibody.
5. The antibody of claim 3, wherein the protein having SEQ ID NO:1 is glycosylated or the fragment of SEQ ID NO:1 is glycosylated.
6. The antibody of claim 3, wherein the protein having SEQ ID NO:1 is not glycosylated or the fragment of SEQ ID NO:1 is not glycosylated.
7. A method to inhibit metastasis by a cancer cell in a mammal comprising administering to the mammal an antibody that selectively binds to SEQ ID NO:1, or a fragment of SEQ ID NO:1.
8. The method of claim 7, wherein the cancer cell is an epidermoid carcinoma cell, a prostate cancer cell, a colon cancer cell, a fibrosarcoma cell, a gastric cancer cell, a liver cancer cell, a breast cancer cell, a lung cancer cell, and a kidney rhabdoid cancer cell.
9. The method of claim 7, wherein the cancer cell is a Hep3 cell.
10. The method of claim 7, wherein the antibody is a monoclonal or a polyclonal antibody.

11. The method of claim 7, wherein the antibody selectively binds to a protein having SEQ ID NO:1 that is glycosylated.
12. The method of claim 7, wherein the antibody selectively binds to a protein having SEQ ID NO:1 that is not glycosylated.
13. The method of claim 7, wherein the antibody is contained in a pharmaceutical composition comprising the antibody and a pharmaceutical carrier.
14. A method to diagnose cancer in a mammal comprising,
 - (a) contacting an antibody that selectively binds to SEQ ID NO:1, or a fragment of SEQ ID NO:1, with a test sample obtained from the mammal, and;
 - (b) determining if the antibody binds to the test sample to a greater extent than the antibody binds to a control sample of non-cancerous tissue.
15. The method of claim 14, wherein the cancer is selected from the group consisting of epidermoid carcinoma, prostate cancer, colon cancer, fibrosarcoma, gastric cancer, liver cancer, breast cancer, lung cancer, and kidney rhabdoid cancer.
16. The method of claim 14, wherein the mammal is a human.
17. A method to determine if a test sample contains metastatic HEP3 cells comprising,
 - (a) contacting the test sample with an antibody that selectively binds to SEQ ID NO:1, or a fragment of SEQ ID NO:1, and;

- (b) comparing binding of the antibody to the test sample to binding of the antibody to a control sample containing non-metastatic Hep3 cells;
wherein increased binding of the antibody to the test sample as compared to binding of the antibody to the control sample indicates that the test sample contains metastatic HEP3 cells.

- 18. The method of claim 17, wherein the test sample is obtained from a mammal.
- 19. The method of claim 18, wherein the mammal is a human.
- 20. A method to diagnose cancer comprising,
 - (a) combining an antibody that specifically binds to SEQ ID NO:1, or to a fragment of SEQ ID NO:1, with a tissue section; and
 - (b) determining if the antibody selectively binds with a substance in the tissue section.
- 21. A kit comprising an antibody that selectively binds to SEQ ID NO:1, or fragments thereof and packaging material.
- 22. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an antibody that selectively binds to the protein of SEQ ID NO:1, or to a fragment of SEQ ID NO:1, or to a variant of SEQ ID NO:1, wherein the variant of SEQ ID NO:1 has as amino acid 525 either arginine or glutamine, has as amino acid 709 either glucine or aspartic acid, and has as amino acid 827 either serine or asparagine.
- 23. A method to determine if a candidate agent modulates SIMA135 production by a cell comprising,
 - (a) contacting a test cell with the candidate agent, and

- (b) determining if SIMA135 production by the test cell is increased or decreased relative to SIMA135 production by a control cell.
- 24. The method of claim 23, wherein the test cell and the control cell is a HEP3 cell.
- 25. A method of claim 7 wherein the monoclonal antibody is not monoclonal antibody 41-2.
- 26. A method of claim 14 wherein the monoclonal antibody is not monoclonal antibody 41-2
- 27. An antibody of claim 3 wherein the antibody is not monoclonal antibody 41-2.
- 28. A method according to claim 20 wherein the determining step involves heterologous staining of the tissue sample, indicates extensive expression of SIMA135 throughout the tissue sample, or stains malignant glands in the colonic serosa.
- 29. A method for determining the metastasis modulating ability of an agent, comprising:
 - combining the agent with a cell that expresses SIMA-135 to produce a tested cell,
 - determining whether the expression of SIMA-135 from the tested cell is greater or lesser than the amount expressed by the cell before its combination with the agent.
- 30. A method according to claim 29 wherein the cell before its combination is a control cell.

31. A fragment according to claim 2 wherein the fragment contains amino acid 525, and/or amino acid 709, and/or amino acid 827.
32. A variant of the protein according to claim 1 wherein the variant has as amino acid 525 either arginine or glutamine, has as amino acid 709 either glucine or aspartic acid, and has as amino acid 827 either serine or asparagine.
33. An antibody that binds selectively to the variant according to claim 32.